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LIRIOPE AND *OPHIOPOGON* (RUSCACEAE) NATURALIZED IN ALABAMA

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ABSTRACT

Liriope muscari, *L. spicata*, and *Ophiopogon japonicus* are documented as naturalized in Alabama, where they occur on wooded slopes, in floodplains and riparian habitats, and in disturbed sites. The occurrences of *O. japonicus* are the only known instances of naturalization of that species in the USA. Each species is documented by photos of one or more vouchers.
KEY WORDS: *Liriope*, *Ophiopogon*, naturalized, Alabama

Published documentation for the naturalization of *Liriope* and *Ophiopogon* in the USA is essentially lacking, although species of both genera are reported to grow outside of cultivation (e.g., Kartesz 2010; USDA, NRCS 2010). To accompany an overview of these genera as cultivated and naturalized in the USA (Nesom 2010), collections of plants naturalized in Alabama are here placed on record. Specimens are from ANNISTON, JSU, and VDB.

Many of the Alabama sites with naturalized *Liriope* ("monkey grass") and *Ophiopogon* ("mondo grass") are wooded slopes with residential or commercial development above. Habitats of naturalized plants are mostly undisturbed along the Cahaba River in Jefferson and Shelby counties (in the middle of Birmingham), along Black Creek at Noccalula Falls (downstream from the park where they were grown in the garden area) in Etowah County, and along the Tennessee River with residential development above in the town of Sheffield in Colbert County. Naturalized habitats where disturbance is typically minimal include floodplains and riparian sites. Collectively, however, the liriopogons also may occur in historically disturbed areas, cemetaries, or old homesites like those cited below from Dallas County.

Both genera are commonly used in landscapes in our area as a border-grass. As escapes they often have the appearance of an upland *Carex*, except that they usually occur in large clumps, and these plants are not represented well in herbaria because they are probably often overlooked. Each of the species documented here can be expected to become more common in nature — they spread by

asexual fragmentation of the stoloniferous clones and the fruits easily wash away from source populations to establish new ones.

OPHIOPOGON JAPONICUS (Thunb.) Ker-Gawl.

Alabama. **Colbert Co.**: rich woods on N-facing ravine (Cliff Haven) with exposed Tuscumbia Limestone and Fort Payne Chert, adjacent to the Tennessee River (Pickwick Lake) across from McFarland Park in Sheffield; slope scattered with clusters of this exotic along with *Liriope muscari*, most likely spread from development above the ravine, 17 Apr 2006, *Spaulding 12410* (ANNISTON-Fig. 1). **Dallas Co.**: Old Cahawba FW Tract, SW of Selma, near old pecan orchard in historic black cemetary, near N32.32534 W87.09684, 20 Oct 2010, *Barger and Holt OC-95* (ANNISTON-Fig. 2).

LIRIOPE MUSCARI (Dcne.) Bailey

Alabama. **Calhoun Co.**: Coldwater, jct US Hwy 78 and Coldwater Ck, floodplain, 30 Jul 1986, *Lawler 890-Whetstone 15462* (JSU-Fig. 4). **Clay Co.**: forested floodplain area adjacent to campgrounds at Lake Chinnabee Recreation Area, 18 Mar 1995, *Spaulding 8908* (JSU). **Coffee Co.**: vic. of Kingston, along Hwy 474 (Hwy 6 on old map) at 0.1-0.3 mi W of jct with Pea River, local colony on S side of road ca. 0.1 mi W of bridge in small patch of trees by dirt road, 2 Jan 1999, *McDonald 12521* (VDB). **Colbert Co.**: rich woods on N-facing ravine (Cliff Haven) with exposed Tuscumbia Limestone and Fort Payne Chert, adjacent to the Tennessee River (Pickwick Lake) across from McFarland Park in Sheffield; slope scattered with clusters of this exotic along with *Ophiopogon japonicus*, most likely spread from development above the ravine, 17 Apr 2006, *Spaulding 12404* (ANNISTON-Fig 3). **Etowah Co.**: rocky sandstone woods along Black Creek along Noccalula Falls on Lookout Mountain in Gadsden, 6 Aug 1994, *Hodge 2967-Spaulding 7095* (JSU); Gadsden, rocky slope near Paseur Park on Lookout Mountain at jct of Bellevue Drive and Highland Ave., 7 May 1995, *Hodge 4218-Spaulding 7957* (JSU). **Henry Co.**: woods along Chattahoochee River W from Ft. Gaines, Ga.; one large clump just NW of boat launch area, 26 Mar 1999, *McDonald 12605* (VDB). **Houston Co.**: Dothan (NW side of town), along Murphy Mill Rd at jct with Murphy Mill Creek Bridge, on bank near bridge, 22 Jun 1991, *McDonald 2632* (VDB). **Jefferson Co.**: secondary woods in NE Birmingham along Village Creek, Birmingham-Big Canoe Valley district of the Ridge & Valley province, 11 Jun 2000, *Spaulding 10,882* (JSU).

LIRIOPE SPICATA Lour.

Alabama. **Baldwin Co.**: Co. Hwy 47, 0.1 mi E of Interstate Hwy 65, hardwood area with thick understory of *Ligustrum sinense*, 25 May 2002, *Diamond 13220* (ANNISTON-Fig. 5, VDB). **Dallas Co.**: Old Cahawba FW Tract, SW of Selma, near N32.32534 W87.09684, in field leading through old pecan orchard by historic black cemetary, 15 Apr 2010, *Barger and Holt OC-130* (ANNISTON-Figs. 6 and 7), 20 Oct 2010, *Barger and Holt 130a* (ANNISTON), and 20 Oct 2010, *Barger and Holt OC-130b* (ANNISTON); Selma, E of US Hwy 80 along N side of the Alabama River, old warehouse district along the river, 12 Jul 2004, *Diamond 14493* (VDB). **Shelby Co.**: Cahaba River at Co-29, escaped from cultivation but well established, 28 Jul 1977, *Sessler 1772* (VDB); alluvial woods along the Cahaba River, SE of Birmingham, 11 Oct 1997, *Spaulding 10,134* (JSU, VDB).

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ANNISTON MUSEUM OF NATURAL HISTORY
JACKSONVILLE STATE UNIVERSITY HERBARIUM
JSU00013693
Liliaceae[=Convallariaceae/Ruscaceae]
FLORA OF ALABAMA
Ophiopogon japonicus (L. f.) Ker Gawl.
COLBERT COUNTY. Rich woods on north facing ravine (Cliff Haven) with exposed Tuscumbia Limestone & Fort Payne Chert. Adjacent to the Tennessee River (Pickwick Lake) across from McFarland Park in Sheffield. Highland Rim of the Interior Low Plateaus Province/Tennessee Valley District. Slope scattered with clusters of this exotic along with *Liriope*. Most likely spread from development above ravine. Vernacular name: - Mondo-Grass
York Bluffs, USGS Florence 34° 46' 35"N, 87° 40' 56"W
Daniel D. Spaulding 12,410 17 April 2006
w/Brian Keener, Charlie Rose & Jim Lacefield

Figure 1. *Ophiopogon japonicus* naturalized in Colbert County.

d Cahawba study area. SW of Selma, AL (Dallas County).
ected by CR 9 and bordered to the South by CR 2.

Figure 2. *Ophiopogon japonicus* naturalized in Dallas County.

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JSU00013406

ANNISTON MUSEUM OF NATURAL HISTORY

Liriope muscari (Dcne.) Bailey

det. Guy Nesom October 2010

Liliaceae [=Convallariaceae/Ruscaceae]
FLORA OF ALABAMA

Liriope spicatum (Thunb.) Lour.

COLBERT COUNTY. Rich woods on north facing ravine (Cliff Haven) with exposed Tuscumbia Limestone & Fort Payne Chert. Adjacent to the Tennessee River (Pickwick Lake) across from McFarland Park in Sheffield. Highland Rim of the Interior Low Plateaus Province/Tennessee Valley District. Slope scattered with clusters of this exotic along with *Ophiopogon*. Most likely spread from development above ravine. Vernacular name: Creeping Lilyturf; Monky-Grass

York Bluffs, USGS Florence 34° 46' 35"N, 87° 40' 56"W

Daniel D. Spaulding 12,404 17 April 2006
w/Brian Keener, Charlie Rose & Jim Lacefield

Figure 3. *Liriope muscari* naturalized in Colbert County.

JACKSONVILLE STATE UNIVERSITY
HERBARIUM
030508
HERBARIUM OF JACKSONVILLE STATE UNIVERSITY
"Examined for the Flora of Choccolocco Creek"
Loretta L. Weninegar 26 April 2002
Herbarium of Jacksonville State University
Liriope muscari (Decne) L.H. Bailey
Daniel D. Spaulding 29 April 1995
HERBARIUM OF JACKSONVILLE STATE UNIVERSITY
Examined for
"FLORA OF CALHOUN COUNTY, ALABAMA"
C. L. Lawler 1986
Herbarium of Jacksonville State University
FLORA OF ALABAMA
Liriope graminifolia Baker
(fide Bailey 1925)
CALHOUN COUNTY. Coldwater; jct. US 78 and Coldwater Ck. Floodplain.
C. L. Lawler 890 30 July 1986
R. D. Whetstone 15462

Figure 4. *Liriope muscari* naturalized in Calhoun County.

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JACKSONVILLE STATE UNIVERSITY HERBARIUM
JSU00001158

PLANTS OF ALABAMA
Baldwin County
Liriope spicata Lour.
Baldwin County Hwy. 47, .1 mile east of Interstate Hwy. 65.
In hardwood area with thick understory of *Ligustrum sinense* Lour.
31° 01' 06"N, 87° 39' 04"W
A. R. Diamond #13220 25 May 2002
Collected and distributed through Troy State University

Figure 5. *Liriope spicata* naturalized in Baldwin County.

ADMISTON MUSEUM OF NATURAL HISTORY
JACKSONVILLE STATE UNIVERSITY HERBARIUM
JSU00006652
Old Cahawba Study Area
Old Cahawba FW Tract
Cahaba River
Alabama River
Co Rd 9
Co Rd 2
Old Cahawba study area. SW elma, AL (Dallas County).
Bisected by CR 9 and borde o the South by CR 2.
LILIACEAE
Flora of Old Cahawba FW Tract
Liriope spicata (Thunb.) Lour.
Creeping Lilyturf
Dallas County, AL: Near N32.32534 W87.09684; in field leading through old Pecan orchard by historic black cemetary
T. Wayne Barger and Brian D. Holt
Collection Number: OC-130
10/20/2010

Figure 6. *Liriope spicata* naturalized in Dallas County.

JACKSONVILLE STATE UNIVERSITY HERBARIUM
JSU00018717
Cahaba River
Old Cahawba Archaeological Site
Old Cahawba FW Tract
Co Rd 9
Co Rd 2
Alabama River
Old Cahawba Study Area
Old Cahawba study area. S\ of Selma, AL (Dallas County).
Bisected CR 9 and bordered to the South by CR 2.
LILIACEAE
Flora of Old Cahawba FW Tract
Liriope spicata (Thunb.) Lour.
Creeping Lilyturf
Dallas County, AL: Near N32.32534 W87.09684; in field leading through old Pecan orchard by historic black cemetary
T. Wayne Barger and Brian D. Holt
Collection Number: OC-130 b
10/20/2010

Figure 7. *Liriope spicata* naturalized in Dallas County.

Figures 8a and 8b. *Ophiopogon japonicus* in Dallas County, population vouchered by *Barger and Holt OC-95*, 10 Oct 2010. Photos by Wayne Barger.